# EL SALVADOR ARMED FORCES PROCEDURES IN DISASTER SITUATIONS

BY

COLONEL JESÚS ERNESTO LOZA ÁLVAREZ El Salvador Armed Forces

### **DISTRIBUTION STATEMENT A:**

Approved for Public Release. Distribution is Unlimited.

## **USAWC CLASS OF 2008**

The views expressed in this student academic research paper are those of the author and do not reflect the official policy or position of the Department of the Army, Department of Defense, or the U.S. Government.



U.S. Army War College, Carlisle Barracks, PA 17013-5050

maintaining the data needed, and c including suggestions for reducing	lection of information is estimated to completing and reviewing the collect this burden, to Washington Headqu uld be aware that notwithstanding an OMB control number.	ion of information. Send comment arters Services, Directorate for Inf	s regarding this burden estimate ormation Operations and Reports	or any other aspect of the s, 1215 Jefferson Davis	nis collection of information, Highway, Suite 1204, Arlington	
1. REPORT DATE 15 MAR 2008		2. REPORT TYPE  Strategy Research	n Project	3. DATES COVERED <b>00-00-2007 to 00-00-2008</b>		
4. TITLE AND SUBTITLE				5a. CONTRACT NUMBER		
El Salvador Armed Forces Procedures in Disaster Situations				5b. GRANT NUMBER		
				5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)		5d. PROJECT NUMBER				
Jesus Loza Alvarez					5e. TASK NUMBER	
					5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)  U.S. Army War College ,122 Forbes Ave., Carlisle, PA,17013-5220					8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)		
				11. SPONSOR/M NUMBER(S)	ONITOR'S REPORT	
12. DISTRIBUTION/AVAIL Approved for publ	LABILITY STATEMENT ic release; distributi	ion unlimited				
13. SUPPLEMENTARY NO	OTES					
14. ABSTRACT See attached						
15. SUBJECT TERMS						
16. SECURITY CLASSIFIC	16. SECURITY CLASSIFICATION OF: 17. LIMITATION OF 18. NUMBER			19a. NAME OF		
a. REPORT <b>unclassified</b>	b. ABSTRACT unclassified	c. THIS PAGE unclassified	ABSTRACT Same as Report (SAR)	OF PAGES 30	RESPONSIBLE PERSON	

**Report Documentation Page** 

Form Approved OMB No. 0704-0188

#### USAWC STRATEGY RESEARCH PROJECT

#### **EL SALVADOR ARMED FORCES PROCEDURES IN DISASTER SITUATIONS**

by

Colonel Jesús Ernesto Loza Álvarez El Salvador Armed Force

> Dr. Anna Waggener Project Adviser

The views expressed in this student academic research paper are those of the author and do not reflect the official policy or position of the Department of the Army, Department of Defense, or the U.S. Government.

U.S. Army War College CARLISLE BARRACKS, PENNSYLVANIA 17013

#### **ABSTRACT**

AUTHOR: Colonel Jesús Ernesto Loza Álvarez

TITLE: El Salvador Armed Forces Procedures in Disaster Situations

FORMAT: Strategy Research Project

DATE: 25 March 2008 WORD COUNT: 5942 PAGES: 30

KEY TERMS: Cepredenac, Coen, Cica, Hurricanes, Floods, Earthquakes, Central

America

CLASSIFICATION: Unclassified

This Strategy Research Paper (SRP) presents the challenges faced by the Armed Forces of El Salvador units prepared to respond to local and regional natural disasters and caused by man. Also explores the emergency activities planned and organized by the National Emergency Committee (COEN) and realized by the Armed Forces as part of the National Emergency System (SISNAE). These activities are carried out by the State resources with the intention of preparing, mitigating and responding efficiently before adverse events. For this purpose, the Armed Forces maintains military presence in all the national territory, which allows first hand knowledge of threats and existing vulnerabilities in the different sectors to identify the possible disaster risks and obtain results oriented at preparing, mitigating or better positioning effective responses before a contingency. The actions that the Armed Forces develops in the area lead to a diversity of activities with different forms, in coordination with the institutions that integrate the National Emergency System. The SRP serves as base informative document about the employment of the Salvadoran Armed Forces after the signature of

the Peace Agreements, in emergency situations that occur regularly in Central America as a result of rains, earthquakes, hurricanes, floods, and volcanic eruptions.

#### EL SALVADOR ARMED FORCES PROCEDURES IN DISASTER SITUATIONS

All the Salvadorans have been affected, in small or large measure by the earthquakes, floods, hurricanes and volcano eruptions. All these events provoked big destructions in human lives, housings, public buildings, and highways, other infrastructure works, and cultivations. These events are putting on overdraft our vulnerabilities in front of the natural disasters that, with so much frequency affect to the country. It is necessary to add to these events to the terrorist threats that El Salvador could suffer again in certain moments, that come from through the international communism having as allies Cuba, Nicaragua and Venezuela.

As always happens in these cases, the population with less resources, it loaded with the worst part again, when their housings located in towns, villages and cantons to the long and wide of the national territory being destroyed. It is necessary to make a brief approach of the events that they have affected the Salvadoran territory throughout many years.

The floods and the hurricanes are intimately related, they have affected the Salvadoran territory since 1924, but the trajectories of the most important hurricanes, storms and tropical depressions have begun in the channel of the Atlantic Ocean, and very few of them have made it in the Pacific Ocean. The channel of the Atlantic is composed by the ocean Atlantic, the Gulf of Mexico and the Caribbean Sea. For the present investigation, we will only refer to the hurricanes that were formed in channel of the Atlantic; places where the hurricanes that affect the Central American territory arise.

The area within the channel of the Atlantic where these phenomena occur is a function of the month of the year; that is to say, the areas of formation of tropical

depressions change with regard to the month and the year. According to statistics of the last 100 years, at the end of the month of October, tropical systems specifically showed up and entered Central American land in Belize, Honduras and El Salvador. However, in the decade of the 90's more systems were observed than ever before making contact with land in Central America and in an atypical way; inclusive a strong hurricane such as Mitch was developed and had not been observed before.<sup>2</sup>

The most devastating hurricane in the Salvadoran territory was hurricane Mitch.

Hurricane Mitch was one of the most powerful hurricanes that have been seen in the modern era; having up to a maximum speed of sustained winds of 290 km/h. Mitch went through Central America from October 22 to November 5 of 1998, in the hurricane season in the Atlantic.<sup>3</sup>

Mitch was the second deadliest hurricane in the history of El Salvador, killing as many as 18,000 people, as well as causing thousands of millions of dollars in material losses. The Hurricane Stan was the 18<sup>th</sup> tropical storm and the 10<sup>th</sup> hurricane in the Atlantic Ocean during the 2005 hurricane season. The floods and landslides in Central American countries caused at least 1,620 deaths; a similar number to the death count witnessed during Hurricane Katrina, and many more missing.<sup>4</sup> The affected territories were Guatemala and El Salvador. These two countries suffered the largest number of casualties, and dozens of communities and towns were totally isolated. The eruption of the Volcano of Santa Ana on October first, added to the devastation caused by the hurricane, provoking more floods and landslides.<sup>5</sup>

As far as earthquakes, El Salvador is seated in the center of the Central American Isthmus that unites two big masses of lands, North America and South America. The

topography is marked by a series of volcanoes, mountains ranges and hills. Due to the frequent telluric movements during the Spanish conquests, the Spaniards called the region "Valley of the Hammocks." According to the chronology of destructive earthquakes in El Salvador, eight earthquakes generated losses of human lives in the XX and XXI century, in the years 1917, 1919, 1936, 1951, 1965, 1982, 1986 and 2001.

The historical data show that most of the local earthquakes that have generated human losses had their location near metropolitan areas of San Salvador. Only one was located in the western area of the country. It is significant to note that the largest loss of lives occurs from the movements generated in densely populated regions of San Salvador and surroundings areas. A positive correlation exists among density population and number of deaths caused by earthquakes.<sup>8</sup>

The earthquake of October 10, 1986, hit with a magnitude of 5.4 on the Richter scale; claiming the life of 1,500 people, 100 missing people, over 10,000 wounded and more than 15,000 displaced citizens. On January 13, 2001, another strong earthquake struck with a magnitude of 7.6 on the Richter scale. This earthquake completely affected the whole Salvadoran territory. One month after the earthquake of January 13, 2001, El Salvador suffered another seismic quake of 6.6 magnitudes. This telluric movement caused incremental material and human damages in diverse parts of the country.

The earthquakes of January and February 2001 caused the death of more than 1,149 people due to mudslides, 149,900 destroyed dwellings, 178,060 damaged homes, in addition to 688 buried homes, 1.5 million displaced people, and 8,056 injured. Likewise, in El Salvador a young volcanic chain exists, located parallel to the Pacific

Ocean, which is part of the fire belt "Circumpacífico." Historical evidence of big eruptions that have happened in the Salvadoran territory exists. The volcano of Lamatepeque, also known as volcano of Santa Ana; at 2,381 meters sea level, made eruptions in the years of 1621, 1874, 1904, 1920 and 1937. Correspondingly, the volcano of Izalco had mayor eruptions in 1722, 1745, 1753, 1762, 1765 and 1770.<sup>10</sup>

In the Central Mountain range exists the Volcano of San Salvador, the main eruptions of these volcanoes took place in 1575, 1770, 1876 and 1917. San Miguel's Volcano (Chaparrastique) is in the western area of the country, its main eruptions happened in the years 1699, 1762, 1769, 1787, 1798, 1811, 1819, 1844, 1868, 1919, and 1920. Finally, the most recent eruption in El Salvador happened in Santa Ana's province, the volcano llamatepec erupted at 0805 hours on October 1, 2005. This eruption began with an explosion which propelled volcanic ashes and rocks into the skies.

The explosion was followed by an avalanche of hot water that descended the crater killing two people and forced the evacuation of the area. The gases and ashes rose to an altitude of 50,000 feet, destroying thousands of acres of coffee plantations, schools, highways and humble homes. During the earthquakes of 2001, El Salvador suffered estimated losses in excess of 1.6 million dollars which is the equivalent of 12.1% of the internal gross product, 43.5% of its exports and 75% of the national budget for that year.<sup>13</sup>

The previous information demonstrates the quantity and frequency of natural disasters in El Salvador throughout time. It is important to mention that immediately after the disaster, the military components of the Armed Forces declare a state of

emergency and under orders of the Armed Forces Joint Command Staff begin the first actions in support of the civil population, focused mainly on the search and rescue, and evacuation of victims. Given the need to fulfill the humanitarian mission, it is necessary to suspend the execution of all normal unit tasks. Continuing with their actions the Armed Forces begins the organization and installation of headquarters, refugee and aid stations in the most affected areas and population centers.

El Salvador's National Commission of Civil Protection, Mitigation and Disaster Prevention (well known as Civil Protection) is the governmental structure that addresses natural disasters or disasters caused by man. This organization was previously called the National Emergency Committee (COEN). What is Civil Protection and what motivates them to serve? Civil Protection is a public service that the government provides to prevent, mitigate and assist with the effects of the natural disasters on people, goods, the environment or the public services. This ultimately serves the population by preparing them to face natural and man made disasters in the best possible way; as well as creating a self protection culture.<sup>14</sup>

The mission of this organization is to provide a constant and permanent prevention process, mitigation and handling of the emergencies and disasters within the national territory. This support is based mainly on the organizations and the population's participation in the most vulnerable regions impacted by the adverse events that continually recur in the country. Civil Protection continuously executes training at national level in the areas of prevention, mitigation and handling of the emergencies or disasters. By organizing in this manner task forces can plan and immediately react to

face the destructive effects that these phenomenon cause while reducing the maximum impact.<sup>15</sup>

Civil Protection also counts on the support of approximately thirty institutions for the accomplishment of their mission. These are coordinated by the Emergency Operations Center (EOC), which is represented in the whole national territory by three committees which are the Departmental Emergency Committee (CDE). Within the organization the departmental Governor presides over the main departments with authority over different institutions conforming to the government structure. <sup>16</sup> The principles and values of the Municipal Emergency Committee (CME) organization are at the same level as those belonging to the CDE. These go into action when catastrophes occur and the need for collaboration with other organizations is required to resolve problems. Generally it is the Armed Forces that respond. Finally, the Local Emergency Committee (LEC), adapts in response to the current situation. This entity does not have organization model's schematic defined, adapts to the current situation. People that are community leaders usually form it. <sup>17</sup>

The Armed Forces collaborates with the different committees and the general population within the national territory in the prevention and action plans in the event of disasters. Support is provided through the officers, noncommissioned officers, and soldiers, as well as with the scarce logistical resources that the military units possess.

When a natural disaster happens, the National Emergency System (NES) is activated immediately under the direction of the President of the Republic. The following are considered support institutions: Ministry of the Interior, Ministry of National Defense, Ministry of Public Works, Ministry of Agriculture, Ministry of Public Health and Social

Attendance, Ministry of Public Security, Foreign Ministry, Education Ministry, Ministry of Economy, and County Commission. In addition, the President of the Republic counts on the support of private companies, service and autonomous institutions, and the different emergency committees mentioned previously.

The NES activation is based on the Law of Civil Defense which is the legal instrument used by the executive organization to start the operations of the NES. Under this law all natural people, public and private institutions, and entities of any nature are obligated to participate in the prevention, mitigation, preparation, response, rehabilitation and reconstruction with community participation. Likewise, the Civil Protection is granted the ability to use the resources of the institutions of the State in emergency situations and disasters.

El Salvador nowadays belongs to a regional and political structure that supports and aids its members; this organization is the Central American Natural Disasters Prevention Coordination Center (CEPREDENAC). The CEPREDENAC is an intergovernmental regional organization, belonging to the Central American Integration System (SICA). CEPREDENAC has been created by national laws from each of the Central American countries, with the function of promoting activities, projects and programs that lead to the reduction of disaster risks that provoke human and economic losses caused by social and natural factors.<sup>18</sup>

CEPREDENAC promotes and coordinates the international cooperation and exchange of information, experiences, technical and scientific consultancy in aspects of prevention, mitigation, attention, and disaster responses. In addition, it systematizes and registers information related with the prevention, mitigation, response, impact, and

recovery of disasters in dynamic and interactive form and accessible at the regional level. In accordance with the decisions taken in the directive meetings as part of the regional dialogue process, as well as the limits established within the strategic frame of the Regional Plan of Disaster Reductions (RPDR) the principles that guide the political plans, strategies and projects of CEPREDENAC are the following:

- The promotion of the integral focus for the reduction of vulnerabilities as an indispensable element of the development processes, which implies the systemic focus in national institutions, regional and national promotion, and the adaptation of norms
- The amplification of participation from other institutional sectors and the civilian population
  - The stimulation of local capacities in risk reduction
  - The stimulation of capable response at the local, national and regional level. 19

CEPREDENAC was founded in 1988, an illustration of the promotion of regional cooperation in disaster prevention. The formation of a directive order integrated and represented by two countries, reflected from a beginning the balance among the participants; the response of organizations and the technical-scientific institutions. In the first stage from 1988 to 1990, the organizations and technical-scientific institutions only cooperated at the regional scale; each in their respective specialty, with a prevalence on the earth sciences. Although integrated in a network the articulation of national systems was not fomented between the two entities nor was the inclusion of others, for example, health and education were on the periphery at this stage.<sup>20</sup>

In the phase from 1990 to 1993, the regional institution opened up to the social interest expressed in the vulnerability perspectives strongly impelled by the studies and

the members of the network. As a consequence of this influence, preparations were made for the modernization of response mechanism as a function of their articulation within an integral prevention system, along with a progressive degree of decentralization. This began with the practice of supporting the creation of local response units. As a result of the Central American Presidents meeting (Guatemala 1993), resolution number 26 was established giving command of the execution of Regional Disaster Reduction Plans and the Emergency Coordination Centers resolutions down to CEPREDENAC as a regional organism. The first Constituent Agreement of CEPREDENAC was signed in the City of Guatemala on October 29th of the same year for the Ministry of External Relationships of Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama. At the moment, there are development initiatives in process in Belize and the Dominican Republic.<sup>21</sup>

The Central American Armed Forces Conference (CFAC) is another Central American level institution to which El Salvador belongs and supports in national emergency disaster situations. The CFAC was instituted to contribute to the security, development, and military integration of the region. It also impels a permanent and systematic effort of cooperation, coordination and mutual support among the Armed Forces for the realization of the collegiate study of common interest topics, and to provide a sound defense level against threats to the democracy, peace and freedom.<sup>22</sup>

In the original agreement, the highest ranking military signatory of the Armed Forces for each country within the hierarchy was designated to create the structure and organization of the new Central American military integration unit. When transforming the political vision into a military instrument the mission, objectives, and organization,

were determined as well as a series of activities that would contribute to foment the trust, and integration measures along with the mechanisms to be provide mutual help in emergency situations.<sup>23</sup>

Which are the CFAC objectives?

- Exchange of information
- Participation in guided forums in the creation of peace conditions, development,
   security, defense and freedom of the region
  - The collegiate study of regional military matters
- To cooperate in the solution of regional problems that require handling of humanitarian help and rescue, in order to reduce their impact on the Central American society
- To establish a mechanism of permanent communication with the Central American Integration System (SICA).<sup>24</sup>

For the execution of their purposes, CFAC organized consists of the Superior Counsel, President, Executive Committee, Annual General Secretary, and members of the Armed forces.

The CFAC integrated quality founding members of the Armed Forces from Guatemala, El Salvador, Honduras and Nicaragua. Their responsibilities include the following:

- To organize and execute Specialized Activities
- To develop the regional educational programs for related topics of interest associated to the functions of the armed forces in the democratic society, development of peace, human rights, and international humanitarian rights

• To organize, equip, train and provide all the facilities for the unfolding of the Humanitarian and Rescue Unit of CFAC (UHR-CFAC) in case of activation.<sup>25</sup>

In 2000 a momentous step was taken with the creation of the CFAC Humanitarian Rescue Unit, identified as UHR-CFAC. Its mission is to execute humanitarian and rescue operations in any Central American country in which a natural or man made disaster occurs to save and protect human life and mitigate the effects of the disaster. The field operations of UHR-CFAC were established as a Humanitarian Help and Rescue operation respecting agreements, international treaties, and laws in effect within the affected State.<sup>26</sup>

The CFAC organization is highly flexible and responds to all contingencies that take place in the Central American environment. Its mitigation plans and prevention of disasters are elaborated for example in the forecast of possible catastrophe scenarios that arise such as floods, earthquakes, forest fires, and epidemics. In this context, the organization possesses a command unit, as well as small units of engineers, health, technical, search and rescue, a support unit that includes aspects related with logistics, military police, and communications.

Inside the organization the Disaster Administration (AD), Evaluation of Damages and Necessities Analysis (EDAN), Humanitarian Help Handling System (SUMA), Search, Salvage and Rescue (BSR), Engineering, and Health are considered for use in a declared state of emergency and a request from the President of the affected country to the Presidents of non-affected countries who in turn order the activation of the humanitarian and rescue units. In October 200 when the fastidious hemorrhage epidemic broke out in the Republic of El Salvador, the CFAC units were activated in

Guatemala and Nicaragua, uniting to the Salvadoran unit in an effort to eradicate the vector transmitter of the hemorrhage and to mitigate the effects of the epidemic.<sup>27</sup>

In the same manner, units of Guatemala and Nicaragua were activated to support the Armed Forces of El Salvador to mitigate the effects of the earthquakes which occurred in the months of January and February, 2001. The activation procedure of the UHR-CFAC units for any of the Central American countries takes into consideration the same execution procedures described next.

The first phase, "Activation," begins with the request from the affected countries Republic President. The Presidents of the countries that are members of CFAC designate the Official Mission headed for the affected country, and through the members of the CFAC Superior Council, activate the respective units, personnel, equipment and vehicles which display the characteristic UHR-CFAC badge identifying the humanitarian operations employees in the exercise. Finally, the roster of personal, equipment and access roads are forwarded to the affected country.

The second phase, "Deployment," begins with the shipment (via land, air, or sea) of units to the affected country where the operational control falls under the UHR-CFAC Commandant who coordinates and offers traveling facilities. Likewise, the supported country through the Military Police coordinates at all levels with civilian and military authorities the arrival of the UHR-CFAC units specifying entrance routes, approaches and deployment sectors. They establish the Center of Humanitarian Information Operations and Rescue CFAC (CIOHR-CFAC) in the affected country, coordinate functions, monitor events, operations, appointment of missions to UHR, radio coverage, decision making and public relationships.

The third phase, "Operation Take My Hand," begins support operations during a period of five days, remitting daily operational reports to the CIOHR-CFAC. In this phase the attended country determines and coordinates with the CFAC Superior Council the continuation of the attendance of UHR support.

The fourth phase, "Retreat," materializes when the Military Police of the affected country provides physical security through escorts to UHR that supported the affected country in the withdrawal movement through the different exit points. The local Military Police coordinate and offer travel assistance (via land, air or sea) to the UHR units.

The fifth phase, "Deactivation," is completed when the Commandants of participating UHR elaborate the Final Report of Operations, presented to the General Secretary.<sup>28</sup>

What is the legal foundation that originally grants intervention in support of the Salvadoran population to the Armed Forces of El Salvador? How is it organized to execute the constitutional mission the Armed Force of El Salvador in disaster situations? The Constitution of the Republic of El Salvador is the first document and the most essential that orders, dictates and directs the participation of the Armed Force of El Salvador in disaster situations or other types of situations. Article 1 mentions the following, "El Salvador recognizes the human being as the origin and end of the State. It is organized for the attainment of justice, judicial security and public well-being. As a consequence, it obligates the State to assure the inhabitants of the Republic the enjoyment of freedom, health, culture, economic well-being and social justice."

Article 211 states the following "The Armed Forces is a permanent institution in Service of the Nation. It is obedient, professional, apolitical and none deliberative".

Article 212 reads as follows, "The Armed Forces has as a mission the defense of the sovereignty of the State and the integrity of the territory. The President of the Republic will have access to the Armed Forces exceptionally for the maintenance of internal peace, in accordance with the Constitution. The Government's fundamental organizations mentioned in Article 86 (The Legislative, the Executive and the Judicial) will have access to the Armed Force to make effective the adopted dispositions within their respective constitutional areas of competency, which complete the Constitution. The Armed Forces will collaborate in the works of public benefit commended by the Executive Organization and will aid the population in cases of national disaster." 30

Article 213 affirms, "The Armed Forces is part of the Executive Organization and is subordinate to the authority of the President of the Republic, in the role of General Commandant. The law, regulations and special dispositions that the President of the Republic adopts define the structure, judicial régime, doctrine, composition and operation". The articles mentioned previously are the fundamental support base that the Armed Institution provides to the executive organization for the materialization of government's programs. In addition, as part of SISNAE the participation of the Armed Forces of El Salvador is legally based on the Law of Civil Protection.

The Armed Force of El Salvador is organized and carries out activities before, during and after a disaster situation. Before the development of a natural disaster the Institution doesn't possess a special or specific organization, yet remains developing normal and routine activities. However, it constantly coordinates with all the authorities and institutions that have response responsibility in the event of a natural disaster being generated.

Within this coordination, the activities of prevention, preparation, mitigation, and alerts are planned before each contingency type. However, the Armed Force carries out procedures before the occurrence of a generating event of disaster, among these they are the links and coordination's with the institutions of SISNAE considered in the National Plan of the government's of the Republic Emergency; this was made at national, provincial and local level.<sup>32</sup>

During the prevention phase, identifications are executed in the whole national territory to determine the areas of risk that affect the civil population for each possible disaster generating event type. In preparation for updated evacuation plans and rehearsals designed to prepare Officers, NCOs' and Soldiers, the development of natural phenomena in the areas of high risk are also monitored.

Mitigation is materialized when engineering plans are developed to reduce or to control the effects of the disaster generating phenomena, to diminish the damages on human life, and the population's goods. In this phase the regulations for the use and handling of natural resources for reducing the deterioration of the environment and the construction codes are established.

During the preparation measures, actions are implemented to reduce the loss of human lives and other damages by organizing opportune and efficiently the response and rehabilitation. Some specialists consider this stage the emergency plans and simulation elaboration phase; however, experience has demonstrated that the intra institutional organization is the fundamental base for the development of operative plans and applications. In conclusion, the preparation includes three basic aspects which are the intra institutional organization and definition of functions at regional, national and

local level, the planning and coordination of activities with preset procedures, and the execution of simulations to check the capacity of institutional responses within the community and contribute to their improvement.<sup>33</sup>

Finally, when the alert declaration materializes it presupposes that the Armed Force and all the entities that have come to the aide of El Salvador will activate the preset action procedures and the population will take specific precautions due to the imminent occurrence of foregone event. The declaration of the alert should be clear, comprehensible, and accessible for dissemination by all possible means available. It should be immediate and without delays suggesting that the catastrophic event is not real nor imminent, yet coherent and without contradictions that it is official information, coming from authorized reliable sources.

Three colors are used to determine the alert type. The green color is given when the expectations of a phenomenon allows foreseeing the occurrence of a dangerous event for the population. The yellow color is when the upward tendency of the development of an event implies imminent situations of risk and severe situations of emergency. Finally, the red color depicts when the phenomenon impacts a certain area presenting potential disastrous effects on human lives and the infrastructure.<sup>34</sup>

When the disaster is imminent or it has impacted, response activities are developed which consider evacuation actions, search, rescue and sanitary conditions, among others. These are carried out during the time when the community is disorganized and the basic services do not work. This phase is of short duration, except in those cases when disasters generate slowly such as droughts, famine and civil conflicts, with the latter being the most dramatic and traumatic. When a disaster

happens the Armed Forces of El Salvador, executes the San Bernardo Plan, which has been elaborated, improved, and updated constantly during the preparation phase.<sup>35</sup>

This plan imposes the following mission to the Armed Institution, "The Armed Force of El Salvador by means of their operative, tactical units and institutional support, in coordination with Civil Protection, will aid the civil population in the whole national territory affected by the disaster with special attention to the areas of high risk, in order to cooperate with the efforts of the integral institutions of SISNAE."

This Plan is guided by the civil population's help in cases of floods, forest fires, eruptions, earthquakes, tropical storms and hurricanes. Within the main activities developed by the Salvadoran Armed Forces when a natural disaster happens, are the following:

- Immediately activate the San Bernardo Plan and execute the coordination's at all level with the civil authorities and the government.
- The Chief of the Joint Command Staff of Armed Forces names a Chief of Staff that coordinates and directs the actions of handling of the emergency.
- The Armed Forces integrates the Emergency Operation Center with Officers,
   NCOs' and soldiers.
  - The red alert has already been decreed.
- The Armed Forces puts at the disposition of the Salvadoran citizens their scarce resources.
  - The Armed Forces organizes and installs housing units.
  - The Armed Forces installs aid stations in the affected areas.

- The Armed Forces executes search and rescue operations, and victim evacuation.
  - The Armed Forces executes patrolling to avoid vandalism and pillage.
- The Armed Forces collaborates with medical care units in the care of the injured.<sup>36</sup>

In addition, the Armed Forces execute air recognizance missions in the affected areas, air transfers of rescue and medical personnel, and recovery of cadavers.

According to the action data documented the Armed Forces carried out during the earthquakes of January and February of 2001 the following: carried out 414 air missions, 235 terrestrial transports, 25 marine transports, 92 warehouses for storing of provisions and clothes, 461 combined (Armed Force and National Civil Police) security task groups for the population, installation and administration of 19 housings and 168 refuges, fed 1.5 million refugees, support 92 Mayors in their emergency management, built 75,000 temporary housings in 60 days, conception and development of logistical processes for the supply, address and execution of supplies.<sup>37</sup>

Finally, the Armed Forces of El Salvador executes tasks after the impact of an event that caused human, economic and material losses. These are aimed at facilitating the recovery process and the development of the normal activities of the country. This phase considers the rehabilitation and the reconstruction of all services. As in the previous phases, the Armed Forces of El Salvador coordinates with the civil authorities at all levels and with government's institutions to develop projects that benefit the affected population. The Armed Institution guides the population in rehabilitation support

activities of the affected areas; it collaborates in the removal of debris and reconstruction of communication roads.<sup>38</sup>

The Armed Forces also carry out combined patrolling in order to discourage and avoid vandalism. This integrates with government's entities to carry out evaluation of damages and analysis of necessities, collaborates in the population's return from evacuation to their place of origin, integrates post-event information gathering efforts, continues with the administration and installation of temporary refugee housing and continues with medical assistance efforts for the population, with the allotment of foods and provisions.<sup>39</sup>

In another context, it is very important to make an analysis of the national situation in El Salvador, an analysis guided toward the threats of a communism, new intervention or terrorist activity, as it happened during the period from 1980 to 1992. In the internal war developed between the Armed Forces and the Front Farabundo Martí for the National Liberation (FMLN) which left many in mourning and pain. It is very important to mention the role of the Armed Force as guarantor of internal peace, the sovereignty of the State and integrity of the territory. They fulfilled their constitutional mission by not allowing the FMLN to take power over the weapons.<sup>40</sup>

Although the current (political, social and economic) conditions of El Salvador are not the same experienced in the decade of the 70's and beginning of the 80's, the period before the war mentioned, the terrorist threats are latent, FMLN still is a political party. Their intentions and desires are the same, to transform El Salvador into a communist country, with the support of the Fidel Castro Cuban régime using Nicaragua as a bridge, mainly with the support of the president from Nicaragua, Daniel Ortega,

commandant of the Sandinista Front of National Liberation (FSLN) that took over power in 1979.<sup>41</sup>

Nowadays El Salvador lives a relative situation of peace, common delinquency, organized crime and the gangs exercise a pressure that destabilizes the normal development of the life of the country, and this level of crime rate has ended up challenging the judicial system and the government. The FMLN, after the signature of the Peace Agreements in 1992, transformed into a political party that nowadays is the second force. Also, the political events that have happened in the Central American region and in the American continent in the last years, where communist parties have won the presidential elections and taken the power, the FMLN has reaffirmed its position with the unconditional support that it received on the behalf of these other countries.<sup>42</sup>

The FMLN has openly manifested to the Salvadoran citizens the intent of obtaining power. They will immediately renew diplomatic, commercial relationships and all other types with Cuba. It will begin and reinforce all types of relationships with Iran, Bolivia, Venezuela, Nicaragua, and other countries of leftist order. However, the Armed Forces remains respectful of the democratic system of the country and is convinced that the true peace rests in the freedom, the civil rights within the empire of the law.<sup>43</sup>

In addition, the Armed Institution after the signature of the Peace Agreements committed to learning the rules of human coexistence and developing a wide program of civil-military relationships, in search of a wide approach within the society in general and making an effort to contribute to the understanding of the role of the Armed Forces in a democratic society.

The Armed Forces of El Salvador has entered in a new era of civil-military relationships where the politicians prevail. The Salvadoran society declares and manifests that the institution clearly understands expanding and growing to a professional level; however, this should not mean that it ignores the development of national life, since as an instrument of the State they play a role that defines the balance inside the new context of the reforms adopted after the signature of the Peace Agreements.<sup>44</sup>

The FMLN on the other hand has accepted and adapted to the changes demanded in the Peace Agreements, mainly in the disarmament topic and non use of the Armed Forces to achieve their objectives; however, within the FMLN sectors there exist orthodox tendencies of maintaining the idea of reaching the political, social and economic total domain of the country through use of force; situation to which the Armed Forces is vigilant indefatigably.<sup>45</sup>

#### Recommendations

After widely expressing how the Armed Forces in El Salvador actively participates in the development of activities in support of the civil local population and in the Central American area in situations of disaster, how they develop relationships with the public institutions and private national organizations, and Armed Forces of Central America; it is suitable to leave captured in this document recommendations that will serve as a point of reference for future initiatives to improve procedures, update unit training of participants, acquisition of equipment and to specifically raise the consciousness of the important role the Armed Institution plays in this type of disasters.

- That the Armed Forces of El Salvador maintains the integration and permanent coordination with the Civil Protection, in order to possess precise, clear data and first hand information at the national level in order to advance the areas of high risk materialized during a disaster.
- That during the phase "before" the disaster, all the institutions belonging to
   NES elaborate the response plan, constantly upgrade the action plans, and develop agile and expeditious coordination systems, necessary in confronting natural disaster conditions or those caused by man in an efficient and effective manner.
- That all the institutions belonging to NES during the phase "before" the disasters execute rehearsals and scenarios designed to facilitate a prompt and effective reaction against the disasters.
- Communication at the corresponding level and the constant exchange of information with CEPREDENAC in order to obtain the necessary support and qualified personnel from NES of El Salvador.
- That the Armed Forces of El Salvador maintains constant relationship with the Central American countries members of CFAC in order to develop combined exercises that contribute to the training of UHR-CFAC units and improve efficient support mechanisms to the affected country.
- That during the phase "before" the disaster, the Armed Forces of El Salvador continues preparing the personnel of the Institution as an ongoing part of the training programs, in scenarios that allow them to be under similar appropriate disaster response conditions.

- That during the phase "before" the disaster, the Armed Forces of El Salvador in coordination with Civil Protection enables the Mayors and its collaborators in each one of the municipalities of the country, with the knowledge necessary to respond to a disaster situation.
- That the Armed Forces of El Salvador be provided with the necessary
   resources required to create flexible units within the organization capable and expressly
   prepared for deployment to confront and indeed respond to a disaster situation.

#### Endnotes

<sup>1</sup> Ministry of Education, *History of El Salvador Volume II* (San Salvador: Ministry of Education, 2002), 234.

<sup>3</sup> National Service of Territorial Studies (SNET), "Meteorology of El Salvador," October 1999; available from http://www.snet.gob.sv; Internet; accessed 15 November 2007.

<sup>7</sup> Doctrine Command and Military Education, "Historical Approach of Volcanic Eruptions and Earthquakes in El Salvador," *Literary Review* (December 2001): 1.

<sup>&</sup>lt;sup>2</sup> Ibid., 235

<sup>&</sup>lt;sup>4</sup> Ministry of Education, History of El Salvador Volume II, 240.

<sup>&</sup>lt;sup>5</sup> National Service of Territorial Studies (SNET), "Meteorology of El Salvador",.

<sup>&</sup>lt;sup>6</sup> Ministry of Education, History of El Salvador Volume II, 245.

<sup>&</sup>lt;sup>8</sup> Ibid.. 2.

<sup>&</sup>lt;sup>9</sup> Ibid.

<sup>&</sup>lt;sup>10</sup> Ibid.. 3.

<sup>&</sup>lt;sup>11</sup> Ibid.

<sup>&</sup>lt;sup>12</sup> Ibid., 4.

<sup>&</sup>lt;sup>13</sup> Ibid.

<sup>14</sup> Ministry of Government, "The National Commission of Civil Protection, Mitigation and Prevention of Disasters," November 2006; available from http://www.gobernacion.gob.sv; Internet; accessed 15 November 2007.

<sup>15</sup> Ibid.

<sup>16</sup> Ibid.

<sup>17</sup> Ibid.

<sup>18</sup> "ANTECEDENTES," linked from *The Coordination Center for the Prevention of the Natural Disasters in Central America (CEPREDENAC) Homepage*; available from http://www.cepredenac.org; Internet; accessed 10 December 2007; "El Contexto Regional," linked from *The Coordination Center for the Prevention of the Natural Disasters in Central America (CEPREDENAC) Homepage*; available from http://www.cepredenac.org; Internet; accessed 10 December 200.

<sup>19</sup> Ibid.

<sup>20</sup> Ibid.

<sup>21</sup> Ibid.

<sup>22</sup> Conference of the Central American Armed Forces (CFAC) Homepage, December 2000; available from http://www.cefac.gob.sv/; Internet; accessed 11 December 2007.

<sup>23</sup> Ibid.

<sup>24</sup> Ibid.

<sup>25</sup> Ibid.

<sup>26</sup> Colonel Olmedo A. Vasquez, Army of Guatemala, *The Conference of Central American Armed Forces (CFAC) an Integration Instrument and Regional Security* (Washingotn, D.C.: Center for Hemispheric Defense Studies, 2001), 09.

<sup>27</sup> Ibid., 10.

<sup>28</sup> Conference of the Central American Armed Forces (CFAC) Homepage

<sup>29</sup> Constitution of the Republic of El Salvador, June 2000; available from http://www.catedras.fsoc.uba.ar/udishal/dt7/el salvador 1983.htm; Internet; accessed 16 December 2007. 30 Ibid. <sup>31</sup> Ibid. <sup>32</sup> Doctrine Command and Military Education, "Participation of the Armed Force in Disaster Situations," Educational Magazine (December 2001): 10. <sup>33</sup> Ibid., 12 <sup>34</sup> Ibid., 15 <sup>35</sup> Ibid., 27 <sup>36</sup> Ibid., 32 <sup>37</sup> Cap Marco Antonio Palacios Luna, *Lecture: The Participation of the Armed Force in the* Disaster of 2001 (El Salvador: School of Strategic High Studies, 2006). <sup>38</sup> Doctrine Command and Military Education, "Participation of the Armed Force in Disaster Situations," 72. <sup>39</sup> Ibid., 76. <sup>40</sup> Doctrine Command and Military Education, "Analysis of the Military Campaign of 1980-1992," Educational Magazine (December 2004): 56. <sup>41</sup> Ibid. 62. <sup>42</sup> Ibid., 71. <sup>43</sup> Doctrine Command and Military Education, "Role of the Armed Force in the Conservation of the Republic," Informative Bulletin (April 2004).

44 Ibid.

45 Ibid.